

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019549**Date Inspected:** 24-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Kelly Leavitt, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Bay 10

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Yu Zhi Lai.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path

PCMK: BK004A1-019

Weld No. 043

Welders: 040302, 040434

Repair No. B-WR17605

WPS-B-T-345-FCAW-2G(2F)-Repair-1

Heat straightening of PCMK, Lift 13 SP3081B-01 under approved Heat Straightening procedure, HSR1(B)-9860.

The in process temperature was observed as 230°C. The ZPMC QC was identified as Yu Zhi Lai. The approved

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HSR procedure stated that a maximum temperature of 650°C with 1~3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 20mm.

Heat straightening of PCMK, Lift 13 SP3083A under approved Heat Straightening procedure, HSR1(B)-9858. The in process temperature was observed as 230°C. The ZPMC QC was identified as Yu Zhi Lai. The approved HSR procedure stated that a maximum temperature of 650°C with 1~3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 20mm.

This QA Inspector observed the following work in progress for Bay 10.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Shen Jian Bo.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; OBG

PCMK: OBE11-TR5B-PP099

Weld No. 003

Welder: 0047353

WPS-B-T-2233-TC-U4c-f

Component; OBG

PCMK: OBE11-TR6A-PP096

Weld No. 001

Welder: 047353

WPS-B-T-2231-TC-U4c-f

Bay 12

This QA Inspector observed the following work in progress for Bay 12.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

Mock up welding does not require ZPMC QC.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Hand Rail Mockup

PCMK: BKR-NS-10 & 36

Welder: 053869

WPS-B-T-2234

Bay 2

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Tian Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

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Component; OBG14W Floor Beam Sub Assembly

PCMK: FB3343-001

Weld No. 336

Welder: 045240

WPS-B-T-2232-TC-U4c-T

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No significant conversations

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Leavitt,Kelly	Quality Assurance Inspector
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<b>Reviewed By:</b>	Riley,Ken	QA Reviewer
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